

BOREAL INSTITUTE  
LIBRARY

TT 67-51235

From: Vestnik Leningradskogo Universiteta, 20(12), pp.104-109. 1965.

N. M. Kovyazin

SOME PROBLEMS OF DEER-BREEDING DEVELOPMENT  
IN THE NENETS NATIONAL DISTRICT

(Nekotorye problemy razvitiya olenevodstva v  
Nenetskom natsional'nom okruge)

Translated from Russian  
IPST Cat. No. 1864

Available from  
U. S. DEPARTMENT OF COMMERCE  
Clearinghouse for Federal Scientific and Technical Information  
Springfield, Va. 22151

Published Pursuant to an Agreement with  
The U. S. Department of the Interior and  
The National Science Foundation, Washington, D. C., by the  
Israel Program for Scientific Translations  
Jerusalem 1967

Pam: 636.29: (\*50) KOV

POLARPAM

POLAR  
PAM  
4860

# SOME PROBLEMS OF DEER-BREEDING DEVELOPMENT IN THE NENETS NATIONAL DISTRICT

(Nekotorye problemy razvitiya olenevodstva v  
Nenetskom natsional'nom okruge)

N.M.KOVYAZIN

Deer breeding is the major agricultural branch in the Nenets National District. Eight per cent of all deer in the extreme North are found in this district. Mainly productive deer breeding is developed here, characterized by large herds and a high percentage of female animals. Deer breeding is of great importance for the human population. As in ancient times, deer on the tundra serve as draught animals in hunting and fishing; they are indispensable for transportation in the tending of deer herds. Deer supply the population of the district with meat for food, and with hides for making clothes and footwear. By-products of the deer-breeding industry provide animal-breeding farms with a considerable portion of feeds. The income from deer breeding amounts to more than 24 % of the total fiscal income yielded by all branches of agriculture and industry.

The total head of deer in the district on 1 January 1964 was 165,900. The distribution in various categories of the economic structure in the period 1940 to 1963 is given in Table 1.

TABLE 1

Year	1940	1958	1960	1962	1963
Total head of deer (in thousands)	159.8	150.7	166.3	164.7	165.9
Percentage distribution:					
sovkhozes and state institutions . . . . .	21.0	14.6	14.9	14.8	15.2
kolkhozes (collective farms) . . . . .	36.4	70.3	71.9	72.9	73.3
collective farmers . . . . .	33.7	12.8	11.1	10.5	10.0
individual farmers . . . . .	—	0.3	0.2	0.1	0.1
workers and administrative personnel . . .	8.9	2.0	1.9	1.7	1.4

As the above figures show, almost 9/10 of the total number of deer are under public ownership. The numbers in kolkhozes and sovkhozes increased during the period 1940 to 1963 by more than half, while numbers kept by collective farmers decreased by two thirds; the number kept by workmen, employees and individual farmers fell to one sixth. Through



the assistance of the state, deer breeding in the district has progressed through an increase in the number of animals and the recorded rise in their productivity.

Available data indicate, however, that the annual increment in numbers of deer falls considerably below what could conceivably be attained. This is due to a number of circumstances, principally the question of the use of deer pastures pending between the Nenets District and the Komi ASSR. This has resulted in insufficient winter pastures for deer in the district. This state of affairs has made an accelerated growth of deer herds very difficult at present.

The efficient distribution of deer according to territories in the district is of great importance for the development of deer breeding. Distribution of deer in communal ownership for 1963 is shown in Table 2.

TABLE 2

	Total for district	Areas		
		Kanin-Timanskii	Bol'shezemel'skii	Lower Pechora
Number of animals, . . . .	146,853	54,092	56,104	36,657
In %, . . . . .	100	36.8	38.3	24.9

As can be seen from Table 2, over one third of the deer inhabit the Bol'shezemel'skii area; next in population density are the Kanin-Timanskii and Lower Pechora areas. This distribution of deer is a result of uneven supply of available pastures in these regions.

Increases in numbers of animals depend in great measure on the composition of the herds. Higher percentages of female deer in the herd, coupled with the proper organization of pasturing, can ensure considerable natural increases in the herds. The sex and age composition of deer herds in the district has been characterized in recent years by a comparatively high percentage of does (54–57%), a considerable proportion of 1½–2-year-old animals (20–25%) and a high percentage of draught deer.

With such a low percentage of barren females and a high degree of conservation of both young and adult deer, annual herd increases of up to 20 to 25% are possible. The total of female deer for 1963 compared with 1954 and 1955 shows that the total numbers of female animals increased in 1963 by almost 5%. This is a result of considerable zootechnical work on improvement of herd composition. Since 1957 female numbers have remained stable or even declined somewhat. This can be overcome by decreasing numbers of deer in the draught herds which number about 20,000 head. Given more efficient methods of herd-tending, proper organization of deer pasturing, and settlement of the pasture dispute between the Nenets District and the Komi ASSR which would shorten migration routes (now 1000 to 1500 km), the numbers of draught deer could be considerably reduced.

Control of population density in accordance with the available food stocks is an important factor for the proper utilization of pastures and for



raising work productivity. At present, the average density for the district is 11 head per 1000 hectare of pasture.

Considerable variations in utilization of pastures are found among the different kolkhozes; some practice intensive pasture utilization, others less intensive. For example, in the Rossiya, Timanets and Put' Il'icha kolkhozes the density is 17 head per 1000 ha, but in Put' k Kommunizmu, Severnyi Polyus and Druzhba Narodov kolkhozes, only 6 to 8 head.

Together with the increase in numbers, the productive capacity of deer herds is on the rise. Thus, bulk produce of deer meat (live weight) for the whole district in 1961 was 18 centners per 100 deer; in 1963 it was 23 centners, roughly the amount produced in 1958 by deer breeders of the Magadan Region. The meat yield per 100 deer in the kolkhozes (23 centners) is two thirds that of the sovkhoses (35 centners). Even the leading kolkhozes have not attained the productive level of the sovkhoses. For instance, in 1963 the bulk meat produce was 28 centners per 100 head on Put' k Kommunizmu kolkhoz, 27 centners on Rossiya kolkhoz and 28 centners on im. Vyucheiskogo kolkhoz.

The increases in numbers and productivity of animals have resulted in greater gross output and more salable goods. In 1962 the collective and state farms produced over 28,000 centners of venison (live weight), three quarters of which came from kolkhozes, and one seventh from sovkhoses.

About 70 % of the gross output of meat is handed over to the State or sold by the collective and state farms on the market. The amount of salable meat produced by the district kolkhozes has been rising rapidly. For example the Nar'yan-Ty, im. Vyucheiskogo, and Krasnyi Oktyabr' kolkhozes raised their production from 30 - 40% in 1961 to 60 - 70% in 1962. Rapid increase of salable goods is an index of successful deer breeding in the above kolkhozes.

Deer breeding in the district is highly profitable due to the low cost of production of deer meat. From figures supplied by the Statistical Board of the Nenets National District, the expenditure on deer meat production in 1962 was 719,000 rubles while the income from marketing of produce was 1,352,000 rubles; thus the income is 2.5 times the expenditure. Comparison of the cost of production of venison with that of beef shows the great economic superiority of venison. In 1963, a centner of venison cost about 35 rubles to produce while beef cost 117 rubles 60 kopeks or 3.5 times more than venison. Eighty percent of venison production expenditure is allotted to wages.

However, deer breeding in the Nenets District does have serious shortcomings. First and foremost, female barrenness is high (6.6% in 1962), and also calf mortality (5.8% of young born). Total loss was 29,000 head in 1961, 19,000 in 1962 and 18,600 in 1963 (about 11.2% of the total deer); the losses in kolkhozes were twice as high as in sovkhoses. One of the causes of the high mortality is the great distances between winter and summer pastures. For example, the distances that had to be covered in Krasnyi Oktyabr', Rassvet Severa, and Put' k Kommunizmu kolkhozes in 1962 were twice the average for kolkhozes and four times the district average (in these kolkhozes pasture grounds stretch over a distance of up to 1,000 - 1,500 km).

At the present time winter pastures in kolkhozes and sovkhoses occupy an area of 16,648,000 ha, of which 13,326,000 ha are actually usable. Deer



pastures of the district are situated in several administrative regions; the spring, summer and autumn pastures are within the district territory, and the winter pastures mainly in the forests of the Komi ASSR, in the Tyumen Region, and within the territory of the Mezen' District of the Archangel Region. More than 27 % of the pastures are located in the Komi ASSR, 6 % in the Archangel Region, and 3 % in the Tyumen Region. Thus more than a third of the pastures of the district is outside its borders. Though the deer of the district are assured plentiful green forage during the summer, early autumn and late spring, they are extremely ill-provided with reindeer moss feeds, which are especially insufficient in the early spring and winter seasons. This condition is rendered even more serious by the inadequate organization of the pasturage territory. Thus, for example, in the Bol'shezemel'skaya Tundra the following large pasturage areas have been allotted to the district herds:

1. The Adz'va pasturage area stretches in a narrow strip from the winter forest pastures, located along the Lem-Yu, Kozhva, and Lyzha rivers in the Komi ASSR, to the summer pastures on the shore of the Kara Sea in the area of Pai-Khoi. The winter pastures are in the forest-tundra.

The pastures well provided with reindeer moss are forested, and protected from snowstorms. The snowcover is never deeper than 70–80 cm. Early spring pastures are in the upper reaches of the Makarikha River and along the middle course of the Adz'va River. Reindeer moss here has been considerably trampled down.

2. The Kolva area extends in a narrow strip parallel to the Adz'va area from the Kara Sea shore to the winter stations in the vicinity of Izhma village. Winter pastures are in the taiga, in the upper reaches of the Kozhva and Lyzha rivers, along the Sabys' and Kucha rivers, through pine and spruce—lichen woods with reindeer moss 5–6 cm high. Calving takes place on pastures of low quality, some 350 to 400 km from the summer pastures. The summer pastures are on the shores of the Kara Sea.

3. The Tavrov-Yanevskii area extends from the uplands of Tavrov-Khoi and Yanei in the north to the forests on the banks of the Vad'ma, Zverinets, Mutnaya, Lebed', Denisovka, Labazikha, Kozhva and other rivers in the south. The reindeer moss cover is well developed, having an average height of 4 cm. Calving pastures are 300 km distant from the winter pastures, and are located on the tundra upland lying between the Kolva and Lai. Summer pastures are on the Yanei heights. On the migratory routes along this stretch reindeer moss growths are trampled down, causing difficulties during the migration from pastures.

4. The Vankurei area extends partly over to the left bank of the Pechora River. It is in the forest-tundra region; forestation of winter stations is considerable and reindeer moss is of good quality and height. Calving takes place in the forest-tundra and partly in sparse woods (around the Shchuch'ya and Kuya rivers and their tributaries). Part of the calving area is dominated by dwarf shrub and bare tundra. The main disadvantage of these pastures is that the reindeer moss is considerably damaged. The summer pastures are on the Vankurei Upland.

5. The Tundra area is entirely within the tundra zone. The winter pasturage area is in the southern tundra in the upper reaches of the middle course of the Chernaya and Shapkina rivers. Winter pasturage conditions



are even worse here since reindeer moss reserves are small; but green plants abound under the snow. The climate is severe and the snowcover is dense. Part of the herds pasture on the Pai-Khoi, and part on the Yanei and Vankurei.

Among the above pasture lands of the district are located the pastures of deer herds of the Komi ASSR, which greatly exceed in area the winter pastures of the Nenets District kolkhozes.

In the western part of the district, separate distant strips of uncultivated land are employed for pasturing; this arrangement makes the proper utilization of pasture lands extremely difficult.

These conditions present several serious obstacles to the systematic improvement and increase of deer herds in the district. The main prerequisite for further development of deer breeding is the provision of sufficient pasture area in all seasons of the year, and rational use of pastures. For this, the land settlement administration must allot pastures of the Bol'shezemel'skaya Tundra to the Komi ASSR and to the Nenets National District. This would end the practice of strip pastures, shorten the migration routes and facilitate parcelization of new distinct pastures for specific kolkhozes; all this on the basis of a thorough quantitative and qualitative survey and assessment of lands. In the region of Timanskii and Malozemel'skaya tundras, where the pastures of Kharp, Nar'yan-Ty and im. Vyucheiskogo kolkhozes, and of Indigskii sovkhov, the agricultural station, etc., are situated, the use of strip pastures must be done away with by redistribution among these farms.

Another important task is the improvement of the working and living conditions of the herdsmen by establishing intermediate bases in every kolkhoz, and by transferring the herdsmen to a settled way of life. By now 800 small houses have been built in which the Nentsy live with their families. However, complete settlement of the Nentsy has not been accomplished. The data for the year 1962 indicate that one herdsman tends an average of 173 deer on the tundra. For pasturing 165,000 head the kolkhozes allocate 600 herdsmen, and the sovkhovs 340 herdsmen. Usually the herdsman while traveling is accompanied by some members of his family. Thus, as many as 1,500 to 2,000 people, or 25 - 30% of the entire village population, are in a constant nomadic state. Such a situation cannot be regarded as normal. This section of the population must also be settled in order to facilitate the organization of supply and services to herdsmen. For the settlement of herdsmen, deer would have to be pastured in shifts with the work corps divided into two sections, so that each section guards deer for a fixed period during which the other section works at the settlement base. Development of supplementary farming branches at the base is necessary.

This new pasturing technique solves several problems. Deer breeders are able to be constantly with the herd; the work corps requires fewer transport sleighs, less harness and other equipment; the number of draught animals is halved, with a proportionate increase in the number of female animals; guarding of deer is more efficient and productivity of deer breeding is enhanced; production of meat and income yielded by deer breeding markedly increase. For instance, in 1960 the fifth work corps of Nar'yan-Ty kolkhoz achieved a record of 97% survival of adult animals in the herd and an increase of 87 calves per 100 females; the corresponding figures for



1962 were 97.8 and 83.5 %, for 1963, 98.6 and 88.2 %. Transfer of deer breeders to settled life is planned for all the kolkhozes in the district. The main difficulties in implementing this plan are the lack of bases in some kolkhozes for the settlement of herdsmen and for effective means of transportation when transferring them to and from herds.

Proper living conditions for the herdsmen are necessary to assure an improvement in their work productivity. Light, spacious and warm cottages of small size, easily dismantled, must be built for the tundra deer breeders, and supplied with the necessary furniture and household implements, adapted to easy transport. For the transportation of a dismantled cottage, household effects and various chattels, a tractor or a roadworthy and maneuverable cross-country vehicle is required.

The introduction of mechanical transport and progressive methods of deer pasturing will relieve a number of herdsmen and make them available for work in other branches of the district economy. Even now, where herdsmen have switched to a settled way of life through the introduction of shifts in deer pasturing, additional manpower is available for other work.

Experience in deer pasturing gained by the herdsmen at the im. Lenin kolkhoz in the Chukchi District provided with transportable cottages and with tractors shows that mechanization of labor-consuming processes in deer breeding yields good results. Mechanized work corps are capable of moving 20 to 30 times in one season (the usual numbers are 2 - 3 times), taking the deer to better pastures and thus achieving higher levels of productivity.

The implementation of the measures suggested will ensure rapid advances in deer breeding, and assist in solving problems of national economy as posed by the XXII conference of the Communist Party of the Soviet Union.

Received for publication on 11 April 1964

University of Alberta Library



0 1620 0336 6448

Date Due

APR 14 '83

43306

Pam: 636.29: (\*50)

KOV

KOVYAZIN, N.M.

AUTHOR

Some problems of deer-breeding

TITLE development in the Nenets

National District.

43306

BOREAL INSTITUTE FOR NORTHERN STUDIES, LIBRARY  
THE UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA T6G 2E9  
CANADA